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Piirainen et al.(10) **Pub. No.: US 2017/0033961 A1**(43) **Pub. Date: Feb. 2, 2017**(54) **DISTRIBUTED BASE STATION WITH
FREQUENCY DOMAIN INTERFACE ON
WHICH SIGNAL SUBSPACE VARIES
ACCORDING TO FREQUENCY BIN****Publication Classification**(51) **Int. Cl.**
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(2) Date: **Oct. 12, 2016**(57) **ABSTRACT**

A method and apparatus is disclosed for determining a signal subspace in a communications system. A remote apparatus obtains signal streams from antenna elements or signal streams from antenna beams. Based on the obtained signal streams, the apparatus selects a signal subspace for a user, the signal sub-space having a dimension M. Based on the selected signal subspace, the apparatus transmits, via an interface to a central apparatus, M streams of post-fast-Fourier-transform data, the interface being capable of transmitting a different sub-space for different frequency bins.

